

IN THE CLAIMS

Please cancel claims 1-20, and add new claim 21. All pending claims and their present status are produced below.

1-20. (Canceled)

21. (New) A computer-implemented method of generating a layout for an integrated circuit, the computer-implemented method comprising:

generating a layout based on a physical design of the integrated circuit;

performing a first circuit performance analysis on the layout;

incorporating manufacturing enhancements on the layout, the manufacturing

enhancements including optical proximity correction;

performing a second circuit performance analysis on the layout using the layout with

the manufacturing enhancements incorporated therein to generate a taped-out

layout of the integrated circuit;

checking design-rules on the taped-out layout;

modifying the taped-out layout by performing the manufacturing enhancements on

the taped-out layout using at least in part results of the first circuit

performance analysis; and

performing a third circuit performance analysis on the modified taped-out layout with

the manufacturing enhancements included therein to generate a final layout to

be used in manufacturing of masks for fabrication of the integrated circuit.